

**ABSTRACT**

**A COMPACT, HIGH EFFICIENCY, HIGH ISOLATION POWER AMPLIFIER**

A power feedforward amplifier uses integral cavities to provide RF isolation between subcircuits of the power amplifier. The chassis includes a main chassis body and a lid structure adapted to couple with the chassis body and define the subcircuit cavities. The inner lid includes an amplifier dividing wall and interstage walls adapted to isolate the main and error amplifier subcircuits of the feedforward power amplifier and further to isolate individual components of the subcircuits. In one embodiment, the amplifier subcircuits are mounted on a single circuit board and isolated from each other by the dividing wall. A delay line subcircuit portion is integral with the main chassis body and is coupled beneath the error amplifier subcircuit to contain and electromagnetically shield a delay line filter subcircuit while providing direct connection with the error amplifier.